

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 1. (currently amended) A system for providing flexible message-
2 based communications over a centralized messaging infrastructure, comprising:
3 ~~a controller to process a plurality of symmetric digital voice messages; and~~
4 a controller, comprising:
5 an interface to a plurality of devices interconnected over a digital
6 data network, each device being physically located at a location distinctly
7 removed from each other device;
8 a security module configured to provide security to digital voice
9 messages exchanged with each device by applying encryption using a key unique
10 to each of the devices;
11 an access module configured to process a sign-in requested by a
12 user via at least one of the devices; and
13 a session module configured to form a plurality of voice message
14 sessions for the user associated with the at least one device and, for each of the
15 voice message sessions, to add the user associated with the at least one device to a
16 discussion group; and
17 a voice message server configured to centrally transact one or more the
18 voice message sessions over a digital data network, sessions, comprising:
19 a message queue configured to receive the digital voice messages
20 for the at least one device, to associate a user identifier and a discussion group
21 identifier with each of the digital voice messages, and to transiently store each
22 such the digital voice message; and messages; and
23 a queue manager to logically interconnect a plurality of devices by
24 routing each configured to route the transiently stored digital voice message
25 between the interconnected devices, messages to another of the devices,

26 wherein logical participation in a plurality of the discussion groups is
27 provided through exchange of the digital voice messages between the at least one
28 device and each other of the devices in the discussion groups.

1 2. (currently amended) A system according to Claim 1, further
2 comprising:
3 ~~a session manager to manage each voice message sessions, comprising:~~
4 ~~an authentication component to process an operation by at least~~
5 ~~one such device selected from the group comprising at least one of a sign-in and a~~
6 ~~sign-out; and~~
7 a message router to perform store-and-forward processing of the
8 transiently stored digital voice messages.

1 Claim 3 (cancelled).

1 4. (original) A system according to Claim 1, wherein the devices are
2 grouped in a relationship selected from the group comprising one of a one-to-one,
3 one-to-many and many-to-many.

1 Claim 5 (cancelled).

1 6. (currently amended) A system according to Claim 1, further
2 comprising:
3 a storage device configured to persistently store each such digital voice
4 message.

1 7. (currently amended) A system according to Claim 1, further
2 comprising:
3 a voice processing component configured to process analog voice into the
4 digital voice messages.

1 8. (currently amended) A system according to Claim 7, further
2 comprising:

3 a speech recognition component configured to transcribe the digital voice
4 messages using the device.

1 9. (currently amended) A system according to Claim 7, further
2 comprising:

3 a speech recognition component configured to transcribe the digital voice
4 messages using a proxy voice server interfaced to the device over a voice
5 network.

1 10. (currently amended) A system according to Claim 7, further
2 comprising:

3 a speech recognition component configured to transcribe the digital voice
4 messages using translation logic integrated into the device.

1 11. (currently amended) A system according to Claim 7, further
2 comprising:

3 a voice communications interface configured to concurrently transact
4 voice communications over a voice network relative to the voice message session.

1 12. (currently amended) A method for providing flexible message-
2 based communications over a centralized messaging infrastructure, comprising:
3 interfacing a plurality of devices over a digital data network, each device
4 being physically located at a location distinctly removed from each other device;
5 providing security to digital voice messages exchanged with each device
6 by applying encryption using a key unique to each of the devices;
7 processing a sign-in requested by a user via at least one of the devices;
8 forming a plurality of voice message sessions for the user associated with
9 the at least one device and, for each of the voice message sessions, adding the
10 user associated with the at least one device to a discussion group; and
11 processing a plurality of symmetric digital voice messages; and
12 centrally transacting ~~one or more~~ the voice message sessions over a digital
13 data network, sessions, comprising:

14 receiving the digital voice messages for the at least one device;
15 associating a user identifier and a discussion group identifier with
16 each of the digital voice messages;
17 transiently storing each such the digital voice message; and
18 messages; and
19 logically interconnecting a plurality of devices by routing each the
20 transiently stored digital voice message between the interconnected devices.
21 messages to another of the devices.
22 wherein logical participation in a plurality of the discussion groups is
23 provided through exchange of the digital voice messages between the at least one
24 device and each other of the devices in the discussion groups.

1 13. (currently amended) A method according to Claim 12, further
2 comprising:
3 ~~managing each voice message sessions, comprising:~~
4 ~~processing an operation by at least one such device selected from~~
5 ~~the group comprising at least one of a sign-in and a sign-out; and~~
6 performing store-and-forward processing of the transiently stored digital
7 voice messages.

1 Claim 14 (cancelled).

1 15. (original) A method according to Claim 12, further comprising:
2 grouping the devices in a relationship selected from the group comprising
3 one of a one-to-one, one-to-many and many-to-many.

1 Claim 16 (cancelled).

1 17. (original) A method according to Claim 12, further comprising:
2 persistently storing each such digital voice message.

1 18. (original) A method according to Claim 12, further comprising:
2 processing analog voice into the digital voice messages.

1 19. (original) A method according to Claim 18, further comprising:
2 converting analog voice signals into the digital voice messages using the
3 device.

1 20. (previously presented) A method according to Claim 18, further
2 comprising:
3 transcribing analog voice signals into the digital voice messages using a
4 proxy voice server interfaced to the device over a voice network.

1 21. (previously presented) A method according to Claim 18, further
2 comprising:
3 transcribing analog voice signals into the digital voice messages using
4 translation logic integrated into the device.

1 22. (original) A method according to Claim 18, further comprising:
2 concurrently transacting voice communications over a voice network
3 relative to the voice message session.

1 23. (original) A computer-readable storage medium holding code for
2 performing the method according to Claim 12.

1 24. (currently amended) An apparatus for providing flexible message-
2 based communications over a centralized messaging infrastructure, comprising:
3 means for interfacing a plurality of devices over a digital data network,
4 each device being physically located at a location distinctly removed from each
5 other device;
6 means for providing security to digital voice messages exchanged with
7 each device by means for applying encryption using a key unique to each of the
8 devices;
9 means for processing a sign-in requested by a user via at least one of the
10 devices;

11 means for forming a plurality of voice message sessions for the user
12 associated with the at least one device and, for each of the voice message
13 sessions, means for adding the user associated with the at least one device to a
14 discussion group; and
15 ~~means for processing a plurality of symmetric digital voice messages; and~~
16 means for centrally transacting ~~one or more~~ the voice message sessions
17 ~~over a digital data network; sessions, comprising:~~
18 means for receiving the digital voice messages for the at least one
19 device;
20 means for associating a user identifier and a discussion group
21 identifier with each of the digital voice messages;
22 means for transiently storing ~~each such~~ the digital voice ~~message;~~
23 ~~and messages; and~~
24 means for ~~logically interconnecting a plurality of devices by~~
25 routing ~~each the~~ transiently stored digital voice ~~message between the~~
26 ~~interconnected devices; messages to another of the devices,~~
27 wherein logical participation in a plurality of the discussion groups is
28 provided through exchange of the digital voice messages between the at least one
29 device and each other of the devices in the discussion groups.

1 25. (currently amended) A system for providing flexible message-
2 based communications with personal communication devices over a centralized
3 messaging infrastructure, comprising:
4 a plurality of personal communication devices configured to originate
5 digital voice messages comprising digitized ~~voice;~~ voice, each personal
6 communication device being physically located at a location distinctly removed
7 from each other personal communication device;
8 a voice message server configured to communicatively interface to the one
9 or more personal communication devices over a digital data ~~network; and~~
10 network, comprising:

11 a security module configured to provide security to the digital
12 voice messages exchanged with each personal communication device by applying
13 encryption using a key unique to each of the personal communication devices;
14 an access module configured to process a sign-in requested by a
15 user via at least one of the personal communication devices;
16 a session module configured to form a plurality of voice message
17 sessions for the user associated with the at least one personal communication
18 device and, for each of the voice message sessions, to add the user associated with
19 the at least one personal communication device to a discussion group; and
20 a queue manager to centrally process the digital voice messages,
21 comprising:
22 a receiver module configured to receive each digital voice message
23 from at least one such personal communication device;
24 an identification module configured to associate a user identifier
25 and a discussion group identifier with each digital voice message;
26 a message queue configured to transiently store the digital voice
27 message; and
28 a sender module configured to send the digital voice message to at
29 least one such personal communication device identified in the digital voice
30 ~~message.~~ message,
31 wherein logical participation in a plurality of the discussion groups is
32 provided through exchange of the digital voice messages between the at least one
33 personal communication device and each other of the personal communication
34 devices in the discussion groups.

1 26. (currently amended) A system according to Claim 25, further
2 comprising:
3 a database manager configured to interface to a plurality of databases,
4 comprising:
5 a user and discussion group database configured to store session
6 information;

7 a personal information database configured to store personal
8 information;
9 a control module configured to provide an interface authenticating at least
10 one personal communication device against the personal information; and
11 a queue manager configured to stage each such digital voice message and
12 to forward the digital voice message based on the session information.

13 27. (currently amended) A system according to Claim 25, further
14 comprising:

15 a proxy message server configured to communicatively interface a
16 personal communication device with the voice message server.

17 28. (currently amended) A system according to Claim 25, further
18 comprising:

19 a cellular telephone configured to integrate with at least one such personal
20 communication device.

1 29. (currently amended) A system according to Claim 25, wherein the
2 one or more personal communication devices further comprise:

3 a voice message module configured to digitize [[the]] spoken voice
4 messages;

5 a message storage module configured to store transient spoken voice
6 messages, comprising:

7 a buffer configured to assemble outgoing spoken voice messages;

8 a message queue configured to transitorily store the outgoing
9 spoken voice messages; and

10 a message store configured to persistently store saved spoken voice
11 messages.

1 30. (currently amended) A method for providing flexible message-
2 based communications with personal communication devices over a centralized
3 messaging infrastructure, comprising:

4 originating digital voice messages comprising digitized voice through a
5 plurality of personal communication ~~devices~~; devices, each personal
6 communication device being physically located at a location distinctly removed
7 from each other personal communication device;

8 communicatively interfacing the one or more personal communication
9 devices over a digital data ~~network~~; and network, comprising:

10 providing security to the digital voice messages exchanged with
11 each personal communication device by applying encryption using a key unique
12 to each of the personal communication devices;

13 processing a sign-in requested by a user via at least one of the
14 personal communication devices;

15 forming a plurality of voice message sessions for the user
16 associated with the at least one personal communication device and, for each of
17 the voice message sessions, adding the user associated with the at least one
18 personal communication device to a discussion group; and

19 centrally processing the digital voice messages, comprising:

20 receiving each digital voice message from at least one ~~such~~
21 personal communication device;

22 associating a user identifier and a discussion group identifier with
23 each digital voice message;

24 transiently storing the digital voice message; and

25 sending the digital voice message to at least one ~~such~~ personal
26 communication device identified in the digital voice ~~message~~; message,

27 wherein logical participation in a plurality of the discussion groups is
28 provided through exchange of the digital voice messages between the at least one
29 personal communication device and each other of the personal communication
30 devices in the discussion groups.

1 31. (currently amended) A method according to Claim 30, further
2 comprising:

3 interfacing to a plurality of databases, comprising:

4 maintaining a user and discussion group database to store session
5 information;
6 maintaining a personal information database to store personal
7 information;
8 providing an interface authenticating at least one personal communication
9 device against the personal information; and
10 staging each ~~such~~ digital voice message and to forward the digital voice
11 message based on the session information.

12 32. (original) A method according to Claim 30, further comprising:
13 communicatively interfacing a personal communication device with the
14 voice message server through a proxy message server.

15 33. (original) A method according to Claim 30, further comprising:
16 integrating a cellular telephone with at least one such personal
17 communication device.

1 34. (currently amended) A method according to Claim 30, wherein the
2 one or more personal communication devices further comprise:
3 digitizing [[the]] spoken voice messages;
4 storing transient spoken voice messages, comprising:
5 assembling outgoing spoken voice messages;
6 transitorily storing the outgoing spoken voice messages; and
7 persistently storing saved spoken voice messages.

1 35. (original) A computer-readable storage medium holding code for
2 performing the method according to Claim 30.

1 36. (currently amended) An apparatus for providing flexible message-
2 based communications with personal communication devices over a centralized
3 messaging infrastructure, comprising:

means for originating digital voice messages comprising digitized voice through a plurality of personal communication ~~devices;~~ devices, each personal communication device being physically located at a location distinctly removed from each other personal communication device;

means for communicatively interfacing the one or more personal communication devices over a digital data ~~network;~~ and network, comprising:

means for providing security to the digital voice messages exchanged with each personal communication device means for by applying encryption using a key unique to each of the personal communication devices;

means for processing a sign-in requested by a user via at least one of the personal communication devices;

means for forming a plurality of voice message sessions for the user associated with the at least one personal communication device and, for each of the voice message sessions, means for adding the user associated with the at least one personal communication device to a discussion group; and

means for centrally processing the digital voice messages, comprising:

means for receiving each digital voice message from at least one such personal communication device;

means for associating a user identifier and a discussion group identifier with each digital voice message;

means for transiently storing the digital voice message; and

means for sending the digital voice message to at least one such personal communication device identified in the digital voice ~~message;~~ message, wherein logical participation in a plurality of the discussion groups is provided through exchange of the digital voice messages between the at least one personal communication device and each other of the personal communication devices in the discussion groups.